

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To:

see form PCT/ISA220

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY
(PCT Rule 43bis.1)

Date of mailing

(day/month/year) see form PCT/ISA210 (second sheet)

Applicant's or agent's file reference
see form PCT/ISA220**FOR FURTHER ACTION**
See paragraph 2 belowInternational application No.
PCT/GB2004/001150International filing date (day/month/year)
18.03.2004Priority date (day/month/year)
21.03.2003International Patent Classification (IPC) or both national classification and IPC
C02F5/14Applicant
RHODIA CONSUMER SPECIALITIES LIMITED

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☒ Box No. II Priority
- ☒ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1 (a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA220.

3. For further details, see notes to Form PCT/ISA220.

21.01.05
ITEM
DIARIED

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**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**International application No.
PCT/GB2004/001150**Box No. I Basis of the opinion**

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
 - ☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material:
 - ☐ a sequence listing
 - ☐ table(s) related to the sequence listing
 - b. format of material:
 - ☐ in written format
 - ☐ in computer readable form
 - c. time of filing/furnishing:
 - ☐ contained in the international application as filed.
 - ☐ filed together with the international application in computer readable form.
 - ☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**International application No.
PCT/GB2004/001150**Box No. II Priority**

1. ☒ The following document has not been furnished:

- ☒ copy of the earlier application whose priority has been claimed (Rule 43*bis*.1 and 66.7(a)).
☐ translation of the earlier application whose priority has been claimed (Rule 43*bis*.1 and 66.7(b)).

Consequently it has not been possible to consider the validity of the priority claim. This opinion has nevertheless been established on the assumption that the relevant date is the claimed priority date.

2. ☐ This opinion has been established as if no priority had been claimed due to the fact that the priority claim has been found invalid (Rules 43*bis*.1 and 64.1). Thus for the purposes of this opinion, the international filing date indicated above is considered to be the relevant date.
3. Additional observations, if necessary:

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**International application No.
PCT/GB2004/001150**Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability**

The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non obvious), or to be industrially applicable have not been examined in respect of:

- ☐ the entire international application,
☒ claims Nos. 20 21

because:

- ☐ the said international application, or the said claims Nos. relate to the following subject matter which does not require an international preliminary examination (*specify*):
☒ the description, claims or drawings (*indicate particular elements below*) or said claims Nos. 20 21 are so unclear that no meaningful opinion could be formed (*specify*):

see separate sheet

- ☐ the claims, or said claims Nos. are so inadequately supported by the description that no meaningful opinion could be formed.
☐ no international search report has been established for the whole application or for said claims Nos.
☐ the nucleotide and/or amino acid sequence listing does not comply with the standard provided for in Annex C of the Administrative Instructions in that:
- | | |
|----------------------------|--|
| the written form | <input type="checkbox"/> has not been furnished |
| | <input type="checkbox"/> does not comply with the standard |
| the computer readable form | <input type="checkbox"/> has not been furnished |
| | <input type="checkbox"/> does not comply with the standard |
- ☐ the tables related to the nucleotide and/or amino acid sequence listing, if in computer readable form only, do not comply with the technical requirements provided for in Annex C-bis of the Administrative Instructions.
☐ See separate sheet for further details

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**International application No.
PCT/GB2004/001150

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	2-4 6 7 12 14 16 18
	No: Claims	1 5 8-11 13 15 17 19
Inventive step (IS)	Yes: Claims	
	No: Claims	1-19
Industrial applicability (IA)	Yes: Claims	1-19
	No: Claims	

2. Citations and explanations**see separate sheet**

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING
AUTHORITY (SEPARATE SHEET)**

International application No.

PCT/GB04/01150

corrosion of mild steel, copper or aluminium is treated.

The problem to be solved by the present invention may therefore be regarded as how to treat corrosion of mild steel, copper or aluminium is treated.

The use of a corrosion inhibitor as in D1, for treating corrosion of mild steel, copper or aluminium is merely one of several straightforward possibilities from which the skilled person would select, in accordance with circumstances, without the exercise of inventive skill, in order to solve the problem posed.

The solution proposed in claim 12 of the present application cannot be considered as involving an inventive step (Article 33(3) PCT).

3. Dependent claims 2-11, 14-16, 18, 19 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of novelty and/or inventive step.

4. Should the applicant file amended claims, the description has to be harmonized with them (cf. Rule 5.1(a)(iii)PCT).

The attention of the applicant is drawn to the fact that if the application contains an unjustified number of independent claims no examination will be carried out (generally only one independent claim per category is necessary)

The applicant should also indicate in the letter of reply the difference of the subject matter of the new claim vis a vis the state of the art and the significance thereof, in particular the problem solved and or the advantages of the claimed invention with respect to the closest prior art.

In accordance with Rule 5.1(a)(iii)PCT the relevant background art disclosed in the closest documents should be mentioned in the description.

If amendments are filed the applicant must comply with the requirements of Rule 66.8 PCT and indicate the basis in the originally filed application of the amendments made (Article 34(2)(b) PCT) or else these amendments will not be taken into consideration for the establishment of international preliminary examination.

In order to facilitate the examination of the conformity of the amended application with the requirements of Article 34(2) PCT, the applicant is requested to clearly identify the amendments carried out, irrespective of whether they concern amendments by addition, replacement or deletion, and to indicate the passages of the application as filed on which these amendments are based (see also Rule 66.8(a)PCT).

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING
AUTHORITY (SEPARATE SHEET)**

International application No.

PCT/GB04/01150**Re Item III****Non-establishment of opinion with regard to novelty, inventive step and industrial applicability**

Independent claims 20 and 21 do not contain any technical feature and contrary to Rule 6.2.a PCT refer to examples in the description. They are not acceptable under Article 6 PCT.

Re Item V**Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

Reference is made to the following documents:

D1: WO 03/021031 (2003-03-13)

D2: WO 02/08127 (2002-01-31)

Document D2 discloses (see claims 1-3 and 39) the use of THP+ salts in combination with additional compounds as corrosion and sulphide scale inhibitors.

1. D1 discloses (see claims 1, 30, 43, 47) a formulation comprising a THP+ salt and a thio-substituted compound (thiourea), which is used after condensation (and consequently with a ratio thp:thio-substituted compound of 1:1) as iron scale inhibitor (see i.e claim 67) and as, or in combination with, (see claims 51, 65, 66) scale inhibitors, scale dissolvers, corrosion inhibitors.

Consequently, the present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claims 1,13,17 is not new in the sense of Article 33(2) PCT in view of D1.

2. The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claim 12 does not involve an inventive step in the sense of Article 33(3) PCT.

The document **D1** is regarded as being the closest prior art to the subject-matter of claim 12 and discloses the use of a formulation as claimed in claims 1 (and 17) of the present application, used for treating corrosion.

The subject-matter of claim 12 therefore differs from this known use in that